Claims

Dodet Iso

1. A track assembly for use in a utility cart, the track assembly comprising:
a top tandem arm for pivotal operable connection to a frame such that said top
tandem arm will pivot in a substantially vertical plane;

- a bottom tandem arm having a front portion, a rear portion, a top portion, and a bottom portion, said top portion of said bottom tandem arm being pivotally connected to said top tandem arm,
- a front tandem arm idler wheel operably connected to said front portion of said bottom tandem arm;
- a rear tandem arm idler wheel operably connected to said rear portion of said bottom tandem arm; and
- a belt in engagement with said tandem arm idler wheels.
- A utility cart for transporting agricultural implements, said cart comprising:
 a pair of elongated rails suitable for supporting agricultural implements, said rails
 being substantially parallel to each other;
- a transverse rear axle rigidly mounted to said rails;
- a first rear top tandem arm and a second rear top tandem arm pivotally mounted at opposite ends of said rear axle such that said top rear tandem arms can pivot in a plane substantially parallel to said elongated rails, each of said tandem arms having a front portion and a rear portion;
- a first rear bottom tandem arm pivotally mounted to said front portion of said first rear top tandem arm such that said first rear bottom tandem arm can pivot

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longitudinally with respect to said first rear top tandem arm, said first rear bottom tandem arm having a front portion and a rear portion;

a second rear bottom tandem arm pivotally mounted to said front portion of said second rear top tandem arm such that said second rear bottom tandem arm can pivot longitudinally with respect to said second rear top tandem arm, said second rear bottom tandem arm having a front portion and a rear portion;

rear tandem arm wheels attached to said front and rear portions of said first and second rear bottom tandem arms;

- a first rear idler wheel rotatably mounted to said rear portion of said first rear top tandem arm for rotation in a plane substantially parallel to said rails;
- a second rear idler wheel rotatably mounted to said rear portion of said second rear top tandem arm for rotation in a plane substantially parallel to said rails;
- a hitching frame for connection to a towing vehicle, said hitching frame being pivotally connected to a front portion of said elongated rails;
- a transverse front axle rigidly mounted to said hitching frame;
- a first front top tandem arm and a second front top tandem arm pivotally mounted at opposite ends of said front axle such that said top front tandem arms can pivot in a plane substantially parallel to said elongated rails, each of said front tandem arms having a front portion and a rear portion;
- a first front bottom tandem arm pivotally mounted to said rear portion of said first front top tandem arm such that said first front bottom tandem arm can

pivot longitudinally with respect to said first front top tandem arm, said first front bottom tandem arm having a front portion and a rear portion;

- a first front idler wheel rotatably mounted to said front portion of said first front top tandem arm for rotation in a plane substantially parallel to said rails;
- a second front idler wheel rotatably mounted to said front portion of said second front top tandem arm for rotation in a plane substantially parallel to said rails;
- front tandem arm wheels attached to said front and rear portions of said first and second front bottom tandem arms;
- a first tension bar of adjustable length spanning between said first front top tandem arm and said first rear top tandem arm;
- a second tension bar of adjustable length spanning between said second front top tandem arm and said second rear top tandem arm;
- a first continuous belt looped around said first front and first rear idler wheels,
 said first continuous belt having a ground engaging surface for supporting
 the weight of the utility cart and an interior surface engaging said front
 and rear tandem arm idler wheels; and
- a second continuous belt looped around said second front and second rear idler

 wheels, said second continuous belt having a ground engaging surface for
 supporting the weight of the utility cart and an interior surface engaging
 said front and rear tandem arm idler wheels.
- 3. An assembly for use in a foldable stackable frame for mounting agricultural implements, the assembly comprising:

a wing operably attached to said main frame, said wing adjustable between a
working position wherein said wing extends transversely to a longitudinal
axis of said transportation vehicle when said main frame is attached to said
transportation vehicle and a folded position wherein said wing is generally
parallel to said longitudinal axis of said transportation vehicle when said
main frame is attached to said transportation vehicle, said wing being

a main frame for operable attachment to a transportation vehicle;

adapted to have implements attached;

- a stacking arm pivotally connected to said wing and said main frame, said stacking arm being adjustable between a lowered position and a stacked position; and
- a stacking cylinder connected between said main frame and said stacking arm to move said stacking arm and wing into a transport position wherein said stacking arm is in said stacked position and said wing is in said folded position.
- 4. A foldable stackable frame for mounting agricultural implements, the foldable stackable frame comprising:
 - a mounting frame having a forward end and a rearward end;
 - a lift frame having a front portion and a rear portion, said front portion of said lift frame being pivotally mounted proximate to said forward end of said mounting frame;

- a lift cylinder mounted between said mounting frame and said lift frame for raising and lowering said rear portion of said lift frame with respect to said rearward end of said mounting frame;
- a front support frame mounted to said front portion of said lift frame;
- a rear support frame mounted to said rear portion of said lift frame;
- a rear stacking arm having a first end and a second end, said first end of said rear stacking arm being pivotally mounted to said rear support frame for pivoting in a stacking plane;
- a front stacking arm having a first end and a second end, said first end of said front stacking arm being pivotally mounted to said front support frame for pivoting in a plane parallel to said stacking plane;
- a front stacking cylinder mounted operably connected between said front support frame and said front stacking arm to control pivoting of said front stacking arm in said stacking plane;
- a rear stacking cylinder mounted operably connected between said rear support frame and said rear stacking arm to control pivoting of said rear stacking arm in said stacking plane;
- an implement wing suitable for supporting implements operably connected to said rear stacking arm such that said implement wing is pivotal with respect to said rear stacking arm in a folding plane that is generally perpendicular to said stacking plane, said implement wing being adjustable between a working position wherein said implement wing is generally perpendicular to a longitudinal axis of said mounting frame and a folded position

wherein said implement wing is generally parallel to said longitudinal axis of said mounting frame;

a fold cylinder operably connected between said implement wing and said rear stacking arm to control pivoting of said implement wing between said working position and said folded position; and

said stacking cylinders being able to move said implement wings into an elevated transport position wherein said implement wings are elevated above said mounting frame while in said folded position.

5. A self-tucking wheel apparatus for use with agricultural booms, the agricultural booms being of the type adjustable between a working position and a folded transport position, the wheel apparatus providing support for an outboard portion of the boom when the boom is in the working position, the wheel apparatus comprising:

a main bracket for attachment to an agricultural boom, said bracket having a leadward portion and a trailward portion;

a trailward arm pivotally attached to said trailward portion of said main bracket such that said trailward arm can pivot in a substantially vertical plane when said agricultural boom is in an extended working position;

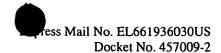
a trailward wheel operably connected to said trailward arm;

a swing bracket pivotally attached to said leadward portion of said main bracket; such that said swing bracket can pivot in a substantially vertical plane when said agricultural boom is in said extended working position;

a leadward wheel operably connected to said swing bracket by a parallel linkage, said parallel linkage extending rearwardly from said swing bracket;

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a wheel tucking lever pivotally attached to said main bracket for pivotal movement in a substantially vertical plane;

a trailward cylinder connected between said wheel tucking lever and said trailward arm for moving said trailward arm between an extended working position and a tucked transport position;

a link between said wheel tucking lever and said swing bracket